

2016-2017 Pathways Major Plan

Geology (BS) – Biology Track

Department of Earth and Physical Science School of Arts & Sciences Academic Core 2F09 | 718-262-2654

The following is a **suggested** plan of study for completion of this degree program.

The goal of a Major Plan is to ensure that students who completed an Associate's Degree (AA or AS) graduate with no more than 120 credits and within a minimum of three years.

- All students should speak with an academic advisor about their academic programs.
 - This document is not a substitute for academic advisement.
- Students are encouraged to take Winter and Summer courses to facilitate their progress towards graduation.
- Transfer students do not need to take all courses in the plan; they should consult with an academic advisor.
- This plan requires transfer credit for the following courses:
 - ENGL 125 (English Composition I); MATH 119 (College Algebra System) + MATH 120 (Pre-Calculus)†
 If MATH 119 + MATH 120 are not transferred to York College, students should take MATH 119 + MATH 120 in the first semester.

| | Credits | | Credits |
|--|---------|-----------------------|---------|
| THIRD YEAR - FALL | 14 | THIRD YEAR - SPRING | 14 |
| MATH 121 | 4 | CHEM 108 + CHEM 109 5 | |
| GEOL 140 | 3 | GEOL 217 5 | |
| BIO 201 | 4 | BIO 202 4 | |
| College Option: Writing Intensive (WI) | 3 | | |
| FOURTH YEAR - FALL | 14 | FOURTH YEAR - SPRING | 12.5 |
| CHEM 111 + CHEM 112 | 5 | GEOL 332 | 2 |
| GEOL 225 | 5 | GEOL 323 1.5 | |
| GEOL 211 | 4 | GEOL Elective* 3 | |
| | | GEOL Elective* | 3 |
| | | GEOL Elective* | 3 |
| FIFTH YEAR - FALL | 12 | | |
| College Option: Writing Intensive (WI): GEOL 425 WI | 4 | | |
| GEOL 334 | 4 | | |
| MATH 111 | 4 | | |

- York students are required to complete (pass) three (3) Writing intensive (WI) courses: two (2) in the lower division (100-200 level) and one (1) in the upper division (300-level).
- If you transferred to York College with an Associate's Degree (AA or AS), or with credit for all General Education requirements, you are exempt from completing two (2) of your lower division (100-200 level) Writing Intensive (WI) courses. You must still complete one WI course in the upper division (300-level) within your major. If your major has no upper division WI course, you must take a WI course chosen in consultation with your major advisor.
- B.S. students must complete 60 credits of liberal arts See Bulletin.
- Students are strongly encouraged to select a Minor program of study, in consultation with an academic advisor, especially those planning to attend graduate school. Minor courses would replace the "free electives" in the Two-Year Plan.

Notes on Geology – Biology Track Major Requirements

*Geology Electives

| Course | Title | Credit | Prerequisite |
|--|---|--------|---|
| Geology Electives | | 8 | |
| Choose 8 credits from the following electives: | | | |
| GEOL282 | Weather and Climate | 3 | |
| GEOL308 | Geomorphology | 3 | GEOL211 |
| GEOL340 | Remote Sensing and Air Photo Interpretation | 2 | GEOL110 or GEOL140 & MATH 101 |
| GEOL341 | Ground Water Hydrology | 2 | GEOL110 or GEOL140 & MATH121 |
| GEOL342 | Rock and Soil Mechanics | 2 | GEOL211 & Trigonometry |
| GEOL343 | Ore Deposits and Ore Evaluation | 2 | GEOL225 |
| GEOL344 | Industrial Minerals and Fossil Fuels | 2 | GEOL225 |
| GEOL346 | Laboratory Techniques in Geology | 2 | GEOL110 or GEOL140 & GEOL225 |
| GEOL349 | Assessment of Environment Impact | 1 | GEOL110 or 140 |
| GEOL403 | Paleoecology | 3 | GEOL213 or perm. of instr. |
| GEOL411 | Sedimentation | 3 | GEOL232 |
| GEOL412 | Stratigraphy | 3 | GEOL211 & 213 or perm. of instr. |
| GEOL441 | Geochemistry | 3 | GEOL333 |
| GEOL442 | Geophysics | 3 | |
| EHS140 | Environmental Management (Basic) | 3 | |
| EHS340 | Pollution Control Technology | 3 | PHYS113, PHYS115 or PHYS117, EHS211, |
| | | | EHS212 |
| EHS420 | Water Quality Analysis & Management | 4 | EHS340 |
| EHS426 | Solid Waste Management | 3 | EHS211, EHS212, CHEM230; or Dept. Perm. |
| | | | Req. |
| EHS429 | Environmental Management (Advanced) | 3 | EHS211 and EHS212; or Dept. Perm. Req. |